1	APPLICATIONS	27	SYSTEMS
2	.Control	28	.Identifying or correcting
3	.Counting on an object, areas		improper counter operation
3	having alternating physical		(e.g., error checking,
	properties (e.g., counting		monitoring; preventing or
	lines on grid, teeth on gear,		correcting improper counter
	windings on coil)		operation)
4	.Betting on the outcome of an	29	Testing or calibrating the
-	event; Totalizers		counter
5	.Game or sport	30	Preventing an inaccurate count
6	.Counting animate or inanimate		as a result of an external
	entities		condition
7	Coins	31	Automatic preset
8	Flat articles (e.g., sheet,	32	Power failure
	bill, ticket)	33	.Using particular code or
9	Vehicles		particular counting sequence
10	Field of view contains plural	34	Minimum change code (e.g., Gray
	entities or entities scanned		code)
	plural times (e.g.,	35	Excess three code
	microscopic particles)	36	Biquinary code
11	Including particle size	37	.Sequential readout of plural
	determination variations		counters or sequential
12	Counting by detecting		sampling of inputs to a
	electrical impedance		counter
	variations	38	.Plug in counter
13	.Registering counts for different	39	.Comparing counts
	<pre>categories (e.g., accounting)</pre>	40	.Nonsignificant zero elimination
14	Where the different categories	41	.Complementing a count
	represent monetary amounts	42	.Converting input or output
	(e.g., wages, charges)		signal from or to an analogue
15	.Counting based on number of	4.0	signal
	times machine or apparatus	43	.Having phase shift
	operates	44	.Counter controlled counter
16	.Determining machine or apparatus	45	.Including reversible counter
	operating time or monitoring	46	.Including ring counter
	machine, apparatus or	47	.Pulse multiplication or division
	operation	48	Multiplication or division by a
17	.Position determining	4.0	fraction
18	Of flat flexible strip (e.g.,	49	.Counter includes circuit for
	tape)		performing an arithmetic function
19	.Measuring or testing	F 0	
20	Time combined with measurement	50	.Compensation for excess or
	of another parameter	Г1	shortage of pulses
21	Fluid flow	51	.Including structure for
22	Weight		detecting or indicating overflow condition
23	Acceleration	F 2	
24	Dimension	52	.With programmable counter (i.e., with variable base)
24.1	Distance and Powered Vehicle	EO	
	(e.g., odometer)	53 54	.With photoelectric sensor
24.2	Distance and Human Activity	54 55	.Using shift register
	(e.g., pedometer, nonpowered		.Particular input circuit
0.5	golf carts)	56	.Particular output circuit
25	Temperature		
26	.Including memory		

## 377 - 2 CLASS 377 ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR SHIFT REGISTERS: CIRCUITS AND SYSTEMS

57	CHARGE TRANSFER DEVICE (E.G.,	96	Using auxiliary pulse generator
	ANALOGUE SHIFT REGISTER, CCD,		triggered by incoming pulses
	BUCKET BRIGADE DEVICE)	97	.Hysteresis storage (e.g.,
58	.Compensating for or preventing		counters using saturable
30	signal charge deterioration		magnetic core elements)
59		98	
	.With feedback	90	.DEVICES HAVING MORE THAN TWO
60	.Particular input or output means		STABLE STATES
61	.Direction and/or path flow	99	.Beam type tube (e.g., magnetron,
	control (e.g., by clocking or		cathode-ray tube)
	biasing, by charge splitting)	100	.Multi-cathode gas discharge
62	In charge-coupled device		tubes
63	.Charge-coupled device	101	USING BISTABLE MAGNETIC CORES OR
64	SHIFT REGISTER		FERROELECTRIC CAPACITORS
65	.Using electromechanical relays	102	USING BISTABLE ELECTRO-OPTICAL
66	. Asynchronous	102	DEVICES
	-	103	
67	.Multirank (i.e., rows of storage	103	COUNTING OR DIVIDING CHAINS USING
	units form a shift register)	104	GAS-FILLED TUBES
68	.Compensating for or preventing	104	PHASED CLOCKING
	signal deterioration	105	.Field-effect transistor
69	.Shift direction control	106	PARTICULAR PARALLEL GATING OR
70	.Particular input circuit		CLOCK SIGNAL
71	Pulse shaping	107	STARTING, STOPPING, PRESETTING OR
72	With feedback		RESETTING THE COUNTER
73	Including logic circuit	108	.Counter chains with a radix or
74	Field-effect transistor		base other than the number two
75	.Particular output circuit		raised to an integral power
76	Sequential output (e.g., tapped	109	Decade
70	delay line)	110	Programmable (e.g., with
77	- · · · · · · · · · · · · · · · · · · ·	110	mechanical or
	.Particular transfer means		electromechanical switch means
78	Phase clocking or synchronizing		for selecting the count
79	Field-effect transistor	111	PARTICULAR INPUT CIRCUITS FOR
80	Parallel clocking	T T T	
81	Logic circuit	110	COUNTER
82	ELECTROMECHANICAL COUNTER	112	INDICATING MEANS
83	.Counting or dividing chains	113	.Using glow discharge lamps
	using relays	114	PARTICULAR OUTPUT CIRCUITS FOR
84	.Programmable (i.e., with		COUNTER
	variable base)	115	PARTICULAR TRANSFER MEANS (E.G.,
85	.Reversible		MASTER-SLAVE)
86	.Particular input means	116	.Including logic circuit
87	-	117	Field-effect device (e.g.,
	.Particular output means		JFET, IGFET, MNOS)
88	.With resetting	118	PULSE COUNTING OR DIVIDING CHAINS
89	.Rotary magnet	119	.Using bistable regenerative
90	.Stepping switch	117	trigger circuits
91	.Clutch or escapement	120	
92	.Pawl and rachet	120	Using only semiconductors
93	WITH SUPERCONDUCTIVE ELEMENT		having at least three electrodes
94	COUNTING OR DIVIDING IN	101	
	INCREMENTAL STEPS (I.E.,	121	Field-effect device (e.g.,
	STAIRCASE COUNTER)	40-	JFET, IGFET, MNOS)
95	.Charge storage (e.g., capacitor	122	Ring counter
	without polarization	123	Reversible counter
	hysteresis)	124	Ring counter
	* · · · · · · · · · · · · · · · · · · ·	125	Reversible counter

## CLASS 377 ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR SHIFT REGISTERS: CIRCUITS AND SYSTEMS

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126	.Ring or reversible counter
127	.Using bistable semiconductors
	having at least three
	electrodes or analogous
	complementary transistor
	circuits (e.g., avalanche
	transistor, SCR's)
128	.Using bistable semiconductors
	having only two electrodes
	(e.g., tunnel diode,
	multilayer diode)
129	PULSES CONTINUOUSLY CIRCULATED IN
	A CLOSED LOOP
130	MISCELLANEOUS

## FOREIGN ART COLLECTIONS

FOR 000 CLASS-RELATED FOREIGN DOCUMENTS

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